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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/560,674	04/27/2000	Tsutomu Shimomura	GEOC.P0003D2	4398
7590 02/12/2004				
THOMAS C. WEBSTER BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN, LLP 12400 WILSHIRE BLVD. SEVENTH FLOOR LOS ANGELES, CA 90025			EXAMINER BUI, KIEU OANH T	
			ART UNIT 2611	PAPER NUMBER 8
DATE MAILED: 02/12/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/560,674

Applicant(s)

SHIMOMURA ET AL.

Examiner

KIEU-OANH T BUI

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-36 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 15-36 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 1 recites the limitation "said wired network" in the claim language on line 10 and line 15. There is insufficient antecedent basis for this limitation in the claim. "A wired network" was canceled in the pre-amendment paper (dated 4/27/00).

Claim Rejections – 35 USC 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

*A person shall be entitled to a patent unless --
(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.*

4. Claims 15-17, 20-25, 27, 31, and 33 are rejected under 35 U.S.C. 102(e) as being anticipated by Broadwin et al. (U.S. Patent No. 5,929,850).

Regarding claim 15, in addition to the rejection 112-2nd above, Broadwin discloses "a method of distributing data" (Fig. 10), "said method comprising: broadcasting a plurality of popular multimedia streams across a broadcast medium", i.e., multimedia streams (as described in col. 9/lines 15-30) are broadcasting via a broadcast medium, for example, via a satellite network (as illustrated in Fig. 10) or via a coaxial cable (col. 5/lines 34-41); "receiving said

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plurality of popular multimedia streams in data broadcast receiver system”, i.e., the multimedia streams are received at a data broadcast receiver system (Fig. 10/end user system with an antenna receiver 120, an interactive decoder 140 and a display 150 with a remote control 152); “caching a subset of said popular multimedia streams in a cache in said data broadcast receiver system”, i.e., a subset or portion of multimedia streams are pre-caching at the receiver system, namely, the set top box (col. 3/lines 14-43); “receiving data information from said wired network” (the examiner’s assumption that a wired network is coupled to the receiver system) (Fig. 10/item 160 for a service provider & item 160 for a media server are coupled to the receiver system in creating a wired network between the end users and the service provider; please note, in the figure shows a user, but it’s understood that the end user represents a plurality of end users, not only one); “and presenting a unified data service to a client computer system coupled to said data broadcast receiver system that comprises said subset of said popular multimedia streams cached on said receiver system and said data information received from said wired network”, i.e., additional information or interactive requests can be locally requested by the end user to the wired network (the service provider), and the service provider provides a unified data service to the user in addition to the multimedia streams received or pre-cached on the receiver system as mentioned earlier (col. 12/line 47 to col. 13/line 30).

As for claim 16, in further view of claim 15 above, Broadwin discloses “wherein said wired network comprises the Internet”, i.e., the Internet access is addressed using this interactive television system (col. 1/lines 18-58).

As for claim 17, in further view of claim 15 above, Broadwin further discloses “wherein said data information from said wired network comprises information from an Internet portal site”, i.e., web pages containing data information or web page links are provided to the user by the Internet portal site (Figs. 17-18 for examples of web pages links and web pages from advertisers for their Internet portal site).

Regarding claim 20, Broadwin teaches “a data broadcast system, said data broadcast system comprising: an MPEG-2 transport stream based data broadcast control center, said MPEG-2 transport stream based data broadcast control center creating a MPEG-2 transport stream based data broadcast stream; digital cable television based data broadcast receiver for receiving said MPEG-2 transport stream in digital cable television markets; and an ATSC terrestrial digital television broadcast based data broadcast receiver for receiving said MPEG-2 transport stream in ATSC terrestrial digital television broadcast markets” (see claim 15 above, Fig. 10, with MPEG-2 transport stream is broadcasting through the network, col. 2/lines 25-52, which suggests that the television system is a ATSC terrestrial digital television for handling digital stream as MPEG-2).

As for claim 21, in further view of claim 20, Broadwin discloses further “comprising: a direct video broadcast satellite based data broadcast receiver for receiving said MPEG-2 transport stream in direct video broadcast satellite markets” (Fig. 10 for satellite receiver system at the end user for receiving MPEG-2 as disclosed earlier).

Regarding claim 22, Broadwin discloses “a method of broadcasting data, said method comprising: accepting a plurality of popular multimedia streams from a plurality of content providers; multiplexing said plurality of popular multimedia streams from said plurality of content providers to create a multiplexed stream; broadcasting multiplexed streams to a plurality of regional broadcasters; multiplexing in additional regional multimedia streams at a regional broadcaster site to create a regional multiplexed stream; and broadcasting said regional multiplexed stream to a plurality of receiver systems”, i.e., multiplexing step is performed at the encoder/multiplexer 106 before broadcasting to the end user, and the service provider is understood to locate around the region or the country as regional broadcasters as illustrated as a service provider for locally providing interactive service to the end user, the interactive decoder media server receives the multiplex streams from the broadcast center as well as the information streams from the service provider if the user request more information using their wired network as mentioned earlier in claim 15 above (col. 12/line 47 to col. 13/line 30).

As for claims 23 and 24, in view of 22, Broadwin discloses “wherein said regional multimedia streams comprises regional advertising” and “wherein said regional multimedia streams comprises regional news” (col. 18/line 19 to col. 19/line 25).

As for claim 25, Broadwin teaches “a method of handling data broadcasts, said method comprising: accepting a multiplexed data broadcasting signal in a receiver system, said multiplexed data broadcasting signal comprising a plurality of popular multimedia streams; caching a subset of said plurality of popular multimedia streams onto permanent storage in said receiver system; and simultaneously routing data from at least one of said plurality of popular

multimedia streams across a data interface of said receiver system” (see claims 15 and 22 above for caching and multiplexing concerned).

As for claim 27, in view of claim 25, Broadwin discloses “wherein said data from at least one of said plurality of popular multimedia streams comprises compressed video” (col. 7/lines 3-12 as the set top receives the compressed audio/video and decompresses them before providing to the user).

Regarding claim 31, Broadwin discloses “a data receiver system, said system comprising: a front-end for receiving a multiplexed data broadcasting signal in a receiver system, said multiplexed data broadcasting signal comprising a plurality of popular multimedia streams; a processor for processing said multiplexed data broadcasting signal; a caching program module, said caching program module caching a subset of said plurality of popular multimedia streams onto permanent storage in said receiver system; and a routing program module, said routing program module simultaneously routing data from at least one of said plurality of popular multimedia streams across a data interface of said receiver system” (see claims 15 and 22 above, with a computer routine working as a routing program for routing data and/or broadcasting data across a data interface of the receiver system, see Figs. 12-14, and col. 14/line 17/line 33 for the entire process).

As for claim 33, in view of claim 32, Broadwin discloses “wherein said data from at least one of said plurality of popular multimedia streams comprises compressed video” (col. 7/lines 3-12 as the set top receives the compressed audio/video and decompresses them before providing to the user).

Claim Rejections - 35 USC 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 18-19, 26, 28-30, 32, and 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Broadwin et al as in claim 15 and further in view of Schmeidler et al. (U.S. Patent No. 6,374,402 B1).

Regarding claims 18, 26 and 32, in further view of claim 15 above, Broadwin does not clearly disclose further comprising the steps of “receiving in said data broadcast receiver system a query from said client system; searching said cache for matching multimedia streams that match said query; and presenting a query response from said data broadcast receiver system to said client system that comprises said matching multimedia streams and matching data information” as claimed; however, it is known in the art that a web server which contains databases always including queries for processing data information, i.e., a SQL standard database query language. In fact, Schmeidler teaches to use the same technique in using queries for handling users’ requests for a web server, with the matching response for multimedia streams, if any (see Figs. 1, 2A, 2B; and col. 17/line 59 to col. 18/line 8 for query, col. 22/lines 22-33 for a CAS web server, and col. 27/line 13 to col. 28/line 56 for the process as the user request interactive service, and the web server responses using database query). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Broadwin’s server system with Schmeidler’s detailed technique in using database query as

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disclosed in order to provide the end user a prompt response and service in an orderly manner by using the query within the cache or the server system for searching and matching the user requests effectively and quickly.

As for claim 19, in view of claim 15 above, Broadwin does not further teach “comprising: encrypting each digital information stream”; however, such a technique of encrypting each digital information stream is known in the art. In fact, Schmeidler teaches the same technique to encrypt the digital information stream for security reasons while “on demand” information data is being transmitted on the Internet (see col. 1/lines 35 to col. 3/line 6 for background reasons why the encryption is needed, and encryption of digital stream is provided for preventing piracy on the Internet). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Broadwin’s system with Schmeidler’s teaching technique of using encryption for digital stream in preventing piracy on the Internet as suggested by Schmeidler.

As for claims 28 and 34, in view of 25, Broadwin does not suggest “wherein said data from at least one of said data interface of said receiver system comprises an Ethernet interface”; however, Schmeidler teaches to include an Ethernet interface for local are network communication (col. 8/lines 6-27). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Broadwin’s system with Schmeidler’s teaching technique of including an Ethernet interface for the user has option to locally communicate within a local area network with their service provider if needed as suggested by Schmeidler.

As for claims 29-30 and 35-36, Broadwin and Schmeidler do not address “wherein said data from at least one of said data interface of said receiver system comprises a Universal Serial Bus interface” and “wherein said data from at least one of said data interface of said receiver system comprises a Universal Serial Bus interface”; however, the Examiner takes official notice that a universal serial bus (USB) interface is too well-known in the art. In March 1995, a group of companies as Compaq, Digital, IBM, Intel, Microsoft, NEC and Northern Telecom publicly announced a new “open and freely licensed” serial bus called USB bus for local area network communication (Telecom Dictionary). An USB interface is simply an interface for complying with USB standards. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Broadwin and Schmeidler’s system with a known USB interface for using within local area network communication as desired.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Broadwin et al. (U.S. Pat. No.5,903,816) disclose a method and system of an interactive television for displaying web-like stills with hyperlinks.

Boucher et al. (U.S. Pat. No.6,675,387 B1) disclose a system and methods for preparing multimedia data using digital video data compression.

Gordon et al. (U.S. Pat. No.6,614,843 B1) disclose a stream indexing for delivery of interactive program guide.

8. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9306, (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krista Kieu-Oanh Bui whose telephone number is (703) 305-0095. The examiner can normally be reached on Monday-Friday from 9:00 AM to 6:30 PM, with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile, can be reached on (703) 305-4380.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.



Krista Bui
Art Unit 2611
January 29, 2004

KRISTA BUI
PATENT EXAMINER